

7. Elevators and Lifts

Sections 11B-206.6 and 11B-407

Elevators

If an elevator is the only accessible path of travel to the voting room, it shall be accessible. Elevators that are adjacent to the voting area, but are not needed to enter the voting area, need not be surveyed. The call buttons used to summon each elevator shall be 48 inches maximum above the floor. (CCR, Sections 11B-407.2.1.1 and 11B-308.3.1.)

These buttons shall be raised above their surrounding surface as shown in Figure 24. (CCR, Section 11B-407.2.1.2.) Each button shall contain a white light that goes on when the button is activated and goes out when the elevator car arrives. (CCR, Section 11B-407.2.1.5.) A 30 inch by 48 inch unobstructed clear floor space shall be provided in front of the hall call buttons. (CCR, Sections 11B-407.2.1.3 and 11B-305.3.)

Objects placed adjacent to the call buttons shall not project more than 10 inches from the wall when a side approach is available. If there is only a front approach to the call buttons, no obstruction is allowed. (CCR, Sections 11B-308.3, 11B-308.2.)



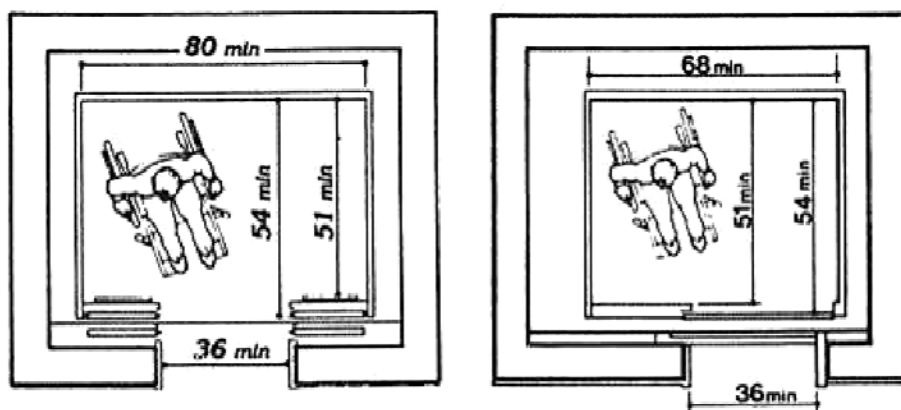
Figure 24. Up and down elevator buttons.

After a call, when the elevator arrives at floor level, it shall provide an audible and visual signal. An audible signal is a tone that sounds once if the elevator is going up, and twice if the elevator is going down. Newer elevators may use computer synthesized voices to announce car arrival and direction. (CCR, Sections 11B-407.2.2.1 and 11B-407.2.2.3.)

Two visual signals (one for up, another for down) are also required to confirm the up or down direction on the elevator. The individual calling the elevator shall be able to see the up and down signals near the hall call buttons light up, whether the signals are mounted in the lobby or on the elevator car. The visual signals shall be at least 2½

inches high and 2½ inches wide. To be seen, the visual signals shall be installed at least 6 feet above the floor. (CCR, Sections 11B-407.2.2.1 and 11B-407.2.2.2.)

The elevator door shall open at least 36 inches for entry and exit. (CCR, Sections 11B-407.3.6 and 11B-407.4.1.) When the elevator door opens in the center, the inside of the elevator is required to be at least 80 inches wide and 51 inches deep (measured from the front wall to the back wall). A side-opening door allows a smaller car width of 68 inches as shown in Figure 25. In buildings with older elevators, the inside of the car can be as small as 48 inches wide by 54 inches deep. (CCR, Section 11B-407.4.1, Exception.) Elevators installed prior to January 1, 2014, may be as small as 48 inches wide by 48 inches deep.



Minimum Dimensions of Elevator Cars

Figure 25. Persons using a wheelchair in an elevator with measurements for minimum dimensions of elevator cars.

At each elevator entrance, there is a gap between the floor outside the elevator and the elevator car. This gap shall be no larger than 1¼ inches wide. (CCR, Section 11B-407.4.3.)

The limited space serves to prevent a wheelchair wheel or a mobility assistance device from falling into the gap. It is recommended that the elevator stop at floor level, placing the floor of the elevator even with the lobby landing. However, it is permissible to have the elevator floor stop within ½ inch above or below the lobby floor.

On each side of the lobby elevator landing, the frame (doorjamb) shall have a sign installed indicating the floor designation in raised characters and Braille. The raised characters shall be at least 2 inches high with the Braille placed immediately below. (CCR, Section 11B-407.2.3.1.) See Figure 26.



Figure 26. Signs within the door jamb or frame of the elevator landing indicating the floor designation.

The main entry floor shall have a raised five-point star that is also 2 inches high placed on the left side of the raised character as shown in Figure 27. (CCR, Section 11B-407.4.7.1.2.)



Figure 27. A raised five-point star on the left side of the main floor number.

These signs shall be placed so the lowest part of any Braille cell is 48 inches or higher above the floor and the bottom of any tactile letter is no more than 60 inches above the floor measured from the baseline of raised characters. (CCR, Section 11B-703.4.1.)

When the elevator arrives and the door opens, it shall remain open at least 5 seconds to allow a person to enter through the doorway. (CCR, Section 11B-407.3.5.)

If the door starts to close while someone is in the doorway, a potential for injury is present. For this reason, all elevator doors required to be accessible on Election Day shall be equipped with an automatic door re-opening device that can detect the presence of a person in the doorway without contact. When a door re-opening device is activated, the door shall remain open a minimum of 20 seconds to allow anyone to move completely in or out of the elevator. (CCR, Sections 11B-407.3.3, 11B-407.3.3.2 and 11B-407.3.3.3.)

Once inside the elevator, a person may move directly in front of the car control buttons for an unobstructed front approach or a side approach. When a front approach is used, the center of the highest car control button shall be a maximum of 48 inches above the car floor. For a side approach, the center of the car control button shall be no higher than 54 inches. (CCR, Sections 11B-308 and 11B-407.4.6.1 Exception 2.)

Whether a voter will make a side approach or front approach depends on the interior dimensions of the elevator and the location of the elevator door.

Elevator control buttons shall also be illuminated. When a voter presses a button in the elevator, the traditional visual indicator, a light "inside" or encircling the button, illuminates to confirm the button is activated. The light goes out when the elevator completes each request. (CCR, Section 11B-407.4.6.2.3.)

A visual indicator is required to show the location of the elevator when it stops at or passes a floor level. This indicator shall be placed above the control panel or above the door. (CCR, Section 11B-407.4.8.1.2.) The numbers used to show the floor location shall be at least ½ inch high. (CCR, Section 11B-407.4.8.1.1.)

As the car passes or stops at a floor, the corresponding floor number lights up and an audible signal sounds. The audible signal is a synthesized voice saying "going up," "going down," or the floor number. (CCR, Section 11B-407.4.8.2.1.) Existing elevators having a tone that sounds once if the elevator is going up, and twice if the elevator is going down also comply with these guidelines.

Raised characters required on the left of each control button provide visual and tactile identification. (CCR, Sections 11B-407.4.7.1.2 and 11B-703.2.5.) The minimum 5/8 inch high characters provide a visual button identification through a contrasting white on a black background. The tactile identification from the raised characters is accompanied by corresponding Braille placed immediately below the raised characters. See Figure 28.

The additional symbol of a raised star is required on the left side of the raised character and Braille identifying the main floor control button. (CCR, Section 11B-407.4.7.1.3.)



Figure 28. Elevator buttons with five-point star, Braille, and raised characters.

Larger elevators may have more than one set of controls. In those cases, only one set of controls is required to comply. (CCR, Section 11B-407.4.7 Exception.)

Emergency control buttons shall have their centerlines 35 inches minimum above the finish floor. (CCR, Section 11B-407.4.6.4.1.)

Emergency two-way communication within the elevator shall be identified with the proper raised characters and Braille as required for control buttons. Two-way communication systems shall provide both audible and visual signals. (CCR, Sections 11B-407.4.7.1.3 and 11B-708.2.) Audible and visual signals allow voters with disabilities to summon rescue personnel without relying on voice communication. If a handset is provided, the cord shall be at least 29 inches long. (CCR, Section 11B-708.3.) When the emergency system is behind a closed door, the door has an accessible lever style hardware that does not require tight grasping, pinching or twisting of the wrist. (CCR, Section 11B-407.4.9.)

In every elevator, a smooth handrail is required on one wall of the car. The handrail shall be positioned 31 inches to 33 inches above the elevator floor when measured to the top of the handrail. Handrails shall have a gap of at least 1 ½ inches between the handrail and the wall. (CCR, Section 11B-407.4.10.)

Lifts

Wheelchair lifts may be provided between levels instead of passenger elevators. Lifts typically provide access where existing limitations prevent the use of a ramp or an elevator. If a lift is provided, it shall allow unassisted entry, operation and exit. (CCR, Section 11B-410.1.)

For unassisted entry and exit, lift doors shall have at least 32 inches clear width for a front approach or 42 inch clear width for a side approach. (CCR, Section 11B-410.1.)

For unassisted operation, voters shall be able to activate the lift controls with one hand without tight grasping, pinching, or twisting of the wrist. (CCR, Sections 11B-410.5 and 11B-309.4.)

The top and bottom landing areas where voters enter or exit the lift shall be a minimum size of 60 inches by 60 inches. (CCR, Section 11B-410.7.) Lifts installed prior to January 1, 2014, may have smaller landing dimensions if it is determined that a person using a 30 inch by 48 inch wheelchair can enter and operate the lift safely. See Figure 29.

To ensure continued operation in case of primary power loss, platform (wheelchair) lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five upward and downward trips. (CCR, Section 11B-207.2.)



Figure 29. Wheelchair lift.

A simple way to modify protruding objects, such as garbage cans or plants, in front of elevator door/lift controls or buttons is to relocate these objects.